



Europäisches
Patentamt
European
Patent Office
Office européen
des brevets

SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 16 85 48 76

Classification of the application (IPC):
H04W 48/04, H04W 48/10, H04W 16/28, H04W 36/00

Technical fields searched (IPC):
H04W, H04B

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X Y	US 2015092676 A1 (PERIYALWAR SHALINI SURESH [CA] ET AL) 02 April 2015 (2015-04-02) * paragraph [0019] - paragraph [0025] * * paragraph [0053] * * paragraph [0088] - paragraph [0092] * * paragraph [0114] - paragraph [0116] * * paragraph [0124] * * figures 1, 5, 7 *	1-5, 7-9, 11, 12 10
A	"3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Overall description; Stage 2 (Release 13)" 3GPP STANDARD; 3GPP TS 36.300, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE, 23 September 2015 (2015-09-23), vol. RAN WG2, no. V13.1.0, pages 1-254, XP050996156 * sections 10.1 - 10.5 * * figures 10.1.2.1.1-1, 10.5.1.2-1 *	1-12
A	CN 103945537 A (ZTE CORP) 23 July 2014 (2014-07-23) * paragraph [0012]; figure 2 * & US 2015319748 A1 (HUANG YADA [CN]) 05 November 2015 (2015-11-05) * paragraph [0012]; figure 2 *	1-12

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search Munich	Date of completion of the search 13 September 2018	Examiner Lutz, Tobias
---------------------------	---	--------------------------

CATEGORY OF CITED DOCUMENTS

- | | |
|---|--|
| X: particularly relevant if taken alone | P: intermediate document |
| Y: particularly relevant if combined with another document of the same category | T: theory or principle underlying the invention |
| A: technological background | E: earlier patent document, but published on, or after the filing date |
| O: non-written disclosure | D: document cited in the application |
| & : member of the same patent family, corresponding document | L: document cited for other reasons |

Disclaimer: this document has been automatically generated using data structured in accordance with WIPO standard ST.36 from the database of search reports of the European Patent Office. For technical reasons, its content and layout may differ from that of the original publication. Only the original published information is legally binding.



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 16 85 48 76

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
Y	<p>Adriana B Flores ET AL: "IEEE Communications Magazine @BULLET RADIO COMMUNICATIONS IEEE 802.11ad: Directional 60 GHz Communication for Multi-Gigabit-per-Second Wi-Fi INTRODUCTION", 01 December 2014 (2014-12-01) URL: http://ieeexplore.ieee.org/ielx7/35/6979940/06979964.pdf?tp=&arnumber=6979964&isnumber=6979940 [retrieved on 26 October 2017 (2017-10-26)] XP055419463 * page 138, column 2, line 1 - line 12 * * figures 5, 7 *</p>	10

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search Munich	Date of completion of the search 13 September 2018	Examiner Lutz, Tobias
---------------------------	---	--------------------------

CATEGORY OF CITED DOCUMENTS

X: particularly relevant if taken alone	P: intermediate document
Y: particularly relevant if combined with another document of the same category	T: theory or principle underlying the invention
A: technological background	E: earlier patent document, but published on, or after the filing date
O: non-written disclosure	D: document cited in the application
& : member of the same patent family, corresponding document	L: document cited for other reasons

Disclaimer: this document has been automatically generated using data structured in accordance with WIPO standard ST.36 from the database of search reports of the European Patent Office. For technical reasons, its content and layout may differ from that of the original publication. Only the original published information is legally binding.



ANNEX TO SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 16 85 48 76

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on 13-09-2018
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 2015092676	A1	02-04-2015	EP	2861014 A1	15-04-2015
			US	2015092676 A1	02-04-2015
CN 103945537	A	23-07-2014	CN	103945537 A	23-07-2014
			EP	2947953 A1	25-11-2015
			US	2015319748 A1	05-11-2015
			WO	2014110914 A1	24-07-2014
US 2015319748	A1	05-11-2015	CN	103945537 A	23-07-2014
			EP	2947953 A1	25-11-2015
			US	2015319748 A1	05-11-2015
			WO	2014110914 A1	24-07-2014